

## REMARKS

Claims 1, 5-10, 21, and 25-30 are pending in this application. Claims 1, 6, 9, 10, 21, and 28-30 have been amended to define more clearly what Applicants regard as their invention. Claims 1 and 21 are in independent form.

The Office Action mailed on February 9, 2005 objected to Claims 1, 5-10, 21, and 25-30 for reciting "interleaving means" instead of "interleaving unit" in Claim 1. Claim 1 has been amended accordingly.

The Office Action also objected to Claims 1, 5-10, 21, and 25-30 for reciting "adapted to". The Office Action states:

It has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

Applicants respectfully traverse this objection and submit that the phrase "adapted to" in Claims 1, 5-7, 9, 10, 21, 25, 26, 29, and 30 is permissible for at least the following reasons.

Firstly, *In re Hutchison* (a copy of which is attached) was decided in 1946, before the Patent Act of 1952 was enacted. This case is not mentioned in the current edition of the MPEP (Original Eighth Edition August 2001, Latest Revision May 2004). The case held that the word "adapted" in an introductory clause of a claim does not constitute a claim limitation. That is, claim limitations are set forth in the body of the claim, but not in the preamble. In fact, the court states "but if it were in that category, it is

anticipated by Moxon. . ." (See underlined portion of the attached copy of *In re Hutchison*.) This is understood to mean that if the phrase with the word "adapted" was in the body of the claim, thus making it a claim limitation, then it would be anticipated by the Moxon reference. Therefore, Applicants submit that the case *In re Hutchison* does not hold that a phrase with the word "adapted" is improper in a claim, but merely holds that such a word in the preamble of a claim does not make the preamble a claim limitation.

Secondly, a simple computerized search of the web site of the U.S. Patent and Trademark Office shows that since 1976 over 440,000 patents have issued with the word "adapted" in the preamble and/or in the body of the claims.

Thirdly, the Federal Circuit has reviewed claims with the phrase "adapted to" in either the preamble or the body or both, and did not find anything objectionable with such a phrase. For example, see the attached copies of the cases *Intermatic Inc. v. Lamson & Sessions Co.*, 61 USPQ2d 1075 (Fed. Cir. 2001), and *Blumenthal v. Barber-Colman Holdings Corp.*, 38 USPQ2d 1031 (Fed. Cir. 1995).

Accordingly, in view of the above, withdrawal of the objections to Claims 1, 5-10, 21, and 25-30 is respectfully requested.

The Office Action rejected Claims 1, 5-10, 21, and 25-30 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,029,264 (Kobayashi et al.); and separately, rejected Claims 1, 5-10, 21, and 25-30 as being anticipated by U.S. Patent No. 6,182,264 (Ott); and, separately, rejected Claims 1, 5-10, 21, and 25-30 as being anticipated by EP 0 998 789 A (Park). The Office Action also rejected Claims 1, 5-10, 21, and 25-30 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,729,560

(Hagenauer et al.). The Office Action also rejected Claims 1, 5-10, 21, and 25-30 under 35 U.S.C. § 103(a) as being obvious from Ott in view of Kobayashi et al.

Claim 1 is directed to an encoding apparatus, including a first coding unit, an interleaving unit, and a second encoding unit. The first encoding unit encodes inputted data, and the interleaving unit interleaves the inputted data. The second encoding unit encodes an output of the interleaving unit. The encoding apparatus executes (1) a first encoding algorithm using the first encoding unit, and (2) a second encoding algorithm using the first encoding unit, the interleaving unit and the second encoding unit. The encoding apparatus shares the first encoding unit when the encoding apparatus executes the first and second encoding algorithms in parallel.

Notably, in the encoding apparatus of Claim 1, (1) a first encoding algorithm is executed using a first encoding unit and (2) a second encoding algorithm is executed using the first encoding unit, a second encoding unit, and an interleaving unit, the encoding apparatus being arranged so as to share the first encoding unit when the first and second encoding algorithms are executed in parallel (see, e.g., Fig.5)<sup>1</sup>.

Kobayashi et al., as understood by Applicants, relates to error correcting a received data stream in a concatenated system. Fig. 12c is a block diagram of a concatenated system employing an expanded decoder for the three encoder systems of Fig. 11a.

Ott, as understood by Applicants, relates to smart dynamic selection of error

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<sup>1/</sup>(It is to be understood, of course, that the scope of Claim 1 is not limited to the details of this embodiment.)

correction methods for DECT-based (Digital Enhanced Cordless Telephony) data services.

Fig. 1 shows a communication system in accordance with Ott.

Hagenauer et al., as understood by Applicants, relates to protected transmission of data on the basis of multi-component coding. A non-uniform error protection is achieved by selection of important bits or bit sequences from an information sequence (I). The bit sequences are supplied to further component coders (COD1 through COD3). Fig. 1 shows a coder means CODE for generating a “turbo-code”.

Park, as understood by applicants, relates to channel encoding/decoding to transmit and receive voice and data. Data with a low data rate or a short data frame is convolutionally encoded and data with a high data rate or a long data frame is turbo-encoded, thereby increasing encoding performance. Fig. 1 is a block diagram of an adaptive channel encoding device for common use in a base station and a terminal according to Park.

Nothing in Kobayashi et al., Ott, Hagenauer et al., or Park would teach or suggest an encoding apparatus in which (1) a first encoding algorithm is executed using a first encoding unit and (2) a second encoding algorithm is executed using the first encoding unit, a second encoding unit, and an interleaving unit, the encoding apparatus being arranged so as to share the first encoding unit when the first and second encoding algorithms are executed in parallel, as recited in Claim 1. Nor would any permissible combination (if any) of Ott and Kobayashi et al. teach or suggest these features.

Each of Kobayashi et al., Ott, Hagenauer et al., and Park merely discusses operating a plurality of encoding circuits and selecting one of the outputs of the plurality of encoding circuits (see, e.g., Fig.12c of Kobayashi et al., Fig.1 of Ott, Fig.1 of

Park, and Fig.1 of Hagenauer et al.). However, nothing in Kobayashi et al., Ott, Hagenauer et al., Park, or any permissible combination (if any) of Ott and Kobayashi et al., would teach or suggest sharing a predetermined encoding circuit, of the plurality of encoding circuits, when different encoding algorithms are executed in parallel by the plurality of encoding circuits.

That is, nothing in Kobayashi et al., Ott, Hagenauer et al., Park, or any permissible combination (if any) of Ott and Kobayashi et al., would teach or suggest an encoding apparatus including first and second encoding units and an interleaving unit such that (1) a first encoding algorithm is executed using the first encoding unit and (2) a second encoding algorithm is executed using the first and second encoding units and an interleaving unit, the encoding apparatus being arranged so as to share the first encoding unit when the first and second encoding algorithms are executed in parallel, as recited in Claim 1.

Accordingly, Claim 1 is believed to be clearly allowable over Kobayashi et al., Ott, Hagenauer et al., and Park, or any permissible combination (if any) of Ott and Kobayashi et al.

Claim 21 is directed to a decoding apparatus including first and second decoding units and first and second interleaving units. The first decoding unit decodes inputted data, and the first interleaving unit interleaves an output of the first decoding unit. The second decoding unit decodes an output of the first interleaving unit, and the second interleaving unit interleaves an output of the second decoding unit. The decoding apparatus executes (1) a first decoding algorithm using the first decoding unit, and (2) a second decoding algorithm using the first and second decoding units and the first and

second interleaving units. The decoding apparatus shares the first decoding unit when the decoding apparatus executes the first and second decoding algorithms in parallel.

Notably, the decoding apparatus of Claim 21 is arranged to share a first decoding unit when first and second decoding algorithms are executed in parallel.

For reasons similar to those discussed above in connection with Claim 1, nothing in Kobayashi et al., Ott, Hagenauer et al., Park, or any permissible combination (if any) of Ott and Kobayashi et al., would teach or suggest an a decoding apparatus which shares a first decoding unit when first and second decoding algorithms are executed in parallel, as recited in Claim 21.

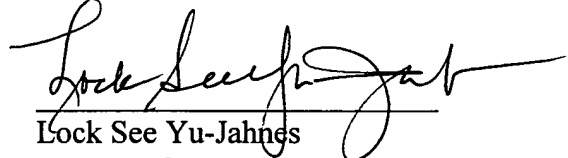
Accordingly, Claim 21 is believed to be clearly allowable over Kobayashi et al., Ott, Hagenauer et al., and Park, or any permissible combination (if any) of Ott and Kobayashi et al.

The other claims in this application depend from Claims 1 or 21 discussed above, and, therefore, are submitted to be patentable for at least the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, individual reconsideration of the patentability of each claim on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and the allowance of the present application.

Applicants' undersigned attorney may be reached in our New York Office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address listed below.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Lock See Yu-Jahnes', written over a horizontal line.

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patents provides mechanism which operates in synchronism with cutting rollers, feeding rollers, and folding rollers. It is true that the prior art mechanisms differ in some minor respects from that defined by the appealed claims. However, the tribunals of the Patent Office

[1] concurred in holding that such differences as existed involved mere mechanical equivalents, which accomplished substantially the same thing in substantially the same way, and that, therefore, the mechanism defined by the appealed claims was not patentable over the disclosures in the reference patents. See *Dow Chemical Co. v. Halliburton Oil Well Cementing Co.*, 324 U. S. 320, 330 [64 USPQ 412, 416].

It will be recalled that the patent to Campbell (No. 1,878,437) discloses a tucker blade having napkin engaging fingers. Although such fingers may differ from the fingers in appellants' structure, that distinction is not set forth in the appealed claims. Furthermore, there is no evidence of record to indicate that there would be any invention in providing the folder blades in the Campbell patent No. 1,666,086 with napkin engaging fingers.

We have carefully considered the arguments presented here by counsel for appellants, but are unable to hold that the tribunals of the Patent Office erred in rejecting the appealed claims.

For the reasons stated, the decision of the Board of Appeals is affirmed.

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33 C.C.P.A. (Patents) 879

## Court of Customs and Patent Appeals

In re HUTCHISON

Appl. No. 5123 Decided Mar. 6, 1946

### PATENTS

#### 1. Pleading and practice in Patent Office

Case under dual prosecution practice has statements of two examiners although references cited by both were same and all appealed claims might have been considered in same division.

#### 2. Appeals to Court of Customs and Patent Appeals—Issues to be determined—Ex parte patent cases

Court is not concerned with allowed claims in instant division or its parent patent; rejected claims are not compared

with allowed claims in division or with patent claims.

#### 3. Construction of specification and claims—Broad or narrow

Functional statements therein do not limit article claims.

#### 4. Construction of specification and claims—Introductory phrase

Statement in introductory clause that article is "adapted" for specific use is not limitation in patentable sense.

#### Particular patents—Templates

Hutchison, Fabrication of Templates or the Like, claims 42, 43, 54, 56, 57, and 58 of application refused.

Appeal from Board of Appeals of the Patent Office.

Application for patent of Miller Reese Hutchison, Serial No. 416334, filed Oct. 24, 1941; Patent Office Divisions 7 and 55. From decision rejecting claims 42, 43, 54, 56, 57, and 58, applicant appeals. Affirmed.

MORRISON, KENNEDY & CAMPBELL, New York, N. Y. (LUTHER E. MORRISON, New York, N. Y., and EDMUND H. PARRY, JR., Washington, D. C., of counsel) for appellant.

W. W. COCHRAN (E. L. REYNOLDS of counsel) for the Commissioner of Patents.

GARRETT, Presiding Judge.

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming decisions of primary examiners rejecting certain product claims of appellant's application, serial No. 416,334, filed October 24, 1941, relating, as recited in the specification, "to a process for immunizing hygroscopic sheet materials against dimensional variations and to the product thereof."

As hereinafter more fully explained, the claims here involved are directed to the particular kind of laminated material from which templates—that is, gauges or patterns for use as guides in forming the desired finished article—may be made.

The claimed invention was described in the decision of the board as follows:

It is disclosed that applicant proposes to immunize hygroscopic sheet material, such as ordinary drawing paper and the like, against dimensional variations resulting from changes in atmospheric moisture by adhering them to backing elements which themselves are immune to such changes, for example, metal or glass. It is disclosed that a water-proof ther-



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VEDY & CAMPBELL, New  
(LUTHER E. MORRISON,  
N. Y., and EDMUND H.  
Washington, D. C., of  
appellant.

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moplastic is used as an adhesive to  
effect a bond between the sheet ma-  
terial and the backing element. Claim  
42, for example, calls for an article  
of manufacture as a laminated unit  
comprising a backing element sur-  
faced with paper having an exposed  
outer surface to receive the design and  
composed of metal stock of requisite  
thickness and rigidity to become the  
finished template and capable of being  
machined, the surfacing paper bonded  
to the metal backing element by  
water-proof heat-set and heat-resist-  
ance adhesive.

We also quote the following from the  
brief of the Solicitor for the Patent  
Office:

This material comprises a sheet of  
metal to which a sheet of drawing  
paper or a layer of photographic  
emulsion is secured by means of a  
heat-settable water-proof adhesive.  
Since it is intended that this composite  
sheet shall be machined to form a  
template, the adhesive selected must,  
of course, be one which will not soften  
at the temperature produced by ma-  
chining. The fact that the paper is  
uniformly secured to the metal pre-  
vents distortion or change in size of  
the paper due to changes in moisture  
content, and thus preserves the di-  
mensions of figures on the drawing  
paper or photographic layer.

Five process and nine product claims  
stand allowed.

There are six claims (all for the prod-  
uct) on appeal. They are numbered, re-  
spectively, 42, 43, 54, 56, 57, and 58.

[1] It appears that because of cer-  
tain differences in the claims involved in  
the application procedure was had in the  
Patent Office under what is described in  
the statement of one of the examiners  
as the "Dual Prosecution Practice,"  
claim 58 (as were the allowed claims)  
being passed upon by an examiner in  
Division 7, which division had general  
jurisdiction of the application, while the  
other claims were passed upon by an  
examiner in Division 55. We understand  
from statements made during the oral  
arguments before us that the "Dual  
Prosecution Practice" was instituted  
comparatively recently. This is the  
first case of that character to come be-  
fore us. The practice itself is imma-  
terial to any issue here presented. The  
board, of course, had before it state-  
ments of two examiners, but each was  
confined to the particular claims before  
the different divisions. The references  
cited by both examiners were the same,  
and we may say that whatever may  
have been the situation with respect to

the allowed claims, so far as we can dis-  
cern, appealed claim 58 might very well  
have been considered in the same division  
where the other appealed claims were  
passed upon.

The application as filed recited that it  
was a division of a co-pending applica-  
tion, 402,128, filed July 12, 1941, and, by  
an amendment entered July 16, 1943, it  
was stated that the parent application  
"matured into patent No. 2,311,547, dated  
February 16, 1943." Appellant's brief  
refers to the patent a number of times,  
but no copy of it was included in the  
record certified to us and we find no  
reference to it, or to the parent appli-  
cation, in any of the decisions of the  
tribunals of the Patent Office, nor in the  
reasons of appeal. The brief of the  
Solicitor for the Patent Office states that  
it "apparently involves a method of  
making templates from laminated ma-  
terial, while the claims here involved are  
directed to the laminated material from  
which the templates are made." It seems  
to be the position of appellant that the  
here involved claims should be allowed  
"to supplement the protection afforded"  
by the issued patent.

It may be said that in the brief for  
appellant it is stated, in substance, that  
the laminated material for which patent  
is sought, "While capable of more gen-  
eral application," is particularly de-  
signed for the manufacture of templates  
used in the mass production of airplane  
parts, and the brief describes in con-  
siderable detail the matter of riveting  
the fuselage and wings of aluminum  
alloy sheets to each other and to the  
frame. It is said "The rivets must  
freely pass through holes in the sheets,  
which attach to other sheets and to the  
frame, requiring that the holes be  
drilled with great care and accuracy."  
This, of course, is a general statement  
of a specific necessity in the manufacture  
of modern airplanes, and appellant as-  
serts that the laminated material de-  
scribed in his specification when used in  
templates renders them immune from  
fluctuation or variation in dimension  
(which sometimes must be accurate to  
"a thousandth of an inch") by reason  
of temperatures, atmospheric moisture  
and other conditions which affect metal  
and paper.

Neither the specification nor the claims  
of the application mention airplanes.  
Much of the specification defines method  
but the product is also defined.

As has been stated, appellant has been  
allowed in this divisional application five  
process claims and nine product claims.  
Apparently (we accept the statements  
in the briefs before us) he was also al-

lowed method claims in the patent based upon the parent application.

[2] We are not concerned, of course, with the allowed claims in either the patent or in this application. The sole question for our determination is whether the six article claims on appeal were properly rejected below, and this we pass upon without further reference to, and without comparing them with, the claims of the patent or the claims which stand allowed in this application.

The board quoted claim 42 (prosecuted in Division 55) as "an example" of all the claims. It paraphrased claim 58 (prosecuted in Division 7) but did not quote the text.

We here quote both (and in quoting them follow the italicization used by appellant in his brief to indicate the limitations which he insists render the claims patentable):

42. As an article of manufacture, adapted for use in the fabrication of a metal template or the like suitable for metal-working operations, a laminated unit comprising a backing element surfaced with paper having an exposed outer surface to receive the template design, said backing element being composed of metal stock possessing the requisite thickness and rigidity to become the finished template and capable of being machined under heat generating conditions in accordance with the template design, and said surfacing paper being bonded to the metal backing element by a water-proof heat-set and heat-resistant adhesive which renders the paper immune from plane dimensional variations resulting from changes in atmospheric moisture, and said adhesive being set under temperature and time conditions which produce a bond between the surfacing paper and the metal backing element that is unaffected by the heat generated during said template machining operations, the heat-resistant temperature of the heat-set adhesive being well above 212° F.

58. As an article of manufacture, adapted to be adhered to a metal backing element for use in the fabrication of a template or the like suitable for metal-working operations, which metal backing element possesses the requisite thickness and rigidity to become the finished template and which is capable of being machined under heat generating conditions in accordance with the template design produced thereon after the adherence of the article, a flexible sheet material having one surface coated with an unexposed light-sensitive photographic emulsion for the

printing of the template design and the opposite surface coated with a water-proof heat-setting and heat-resistant adhesive which, once set, renders the material immune from plane dimensional variations resulting from changes in atmospheric moisture, the temperature and time conditions required for the setting of the adhesive being such that, when the sheet material is bonded to the metal backing element, said bond will be unaffected either by the solutions used in the processing of the photographic emulsion after the printing exposure or by the heat generated during said template machining operations, the heat-resistant temperature of the heat-set adhesive being well above 212° F.

In the introductory clause of claim 43 it is stated that the article is adapted for use in a photographic process (a feature present in other of the claims) and the claim also states that the thickness of the metal is "many times the thickness of the drawing paper." Claim 54 is drawn to a coated paper layer "adapted to be adhered to a metal backing." Claim 56 describes the metal as steel stock having a thickness of one sixteenth of an inch. No thickness is mentioned in the specification and the one sixteenth of an inch definition seems to have been inserted by amendment during the prosecution of the application. Claim 57 calls for photographic paper instead of drawing paper.

The examiner in Division 7 (which had general jurisdiction of the application) in rejecting claim 58 cited the following patents as references:

Linderman 2,000,528 May 7, 1935  
Rojas 2,318,184 May 4, 1943  
Moxon (Br.) 197,051 May 10, 1923

He applied a double rejection; that is "on Linderman alone and also on Rojas or Moxon in view of Linderman."

The examiner in Division 55, in rejecting the other claims cited the same references.

He first discussed claim 42 and held it to be anticipated in the "Rojas, Moxon and Linderman" patents, and, in substance, held the same with respect to claims 43, 54, 56, and 57.

The board followed generally the decisions of the respective examiners, but specifically mentioned (although it did not overrule the others) only Linderman in affirming the examiner's rejection of claim 58.

In the brief for appellant the several claims are quoted, the limitations which his counsel regards as lending patentability to them being italicized, as in

template design and face coated with a heat-setting and heat-resistant material immune from variations resulting from atmospheric moisture, and time conditions setting of the adhesive when the sheet made to the metal backing and will be unaffected by solutions used in the photographic emulsifying exposure or by heat during said template operations, the heat-set temperature of the heat-set metal above 212°F.

Third clause of claim 43 in the article is adapted to the photographic process (a feature of the claims) and states that the thickness of the metal is many times the thickness of the paper." Claim 54 of the paper layer "adapted to a metal backing," states the metal as steel having a thickness of one sixteenth of an inch. No thickness is mentioned in the definition and the one inch definition seems to be by amendment during the application of the photographic paper to the paper.

Division 7 (which had no effect on the application) 58 cited the following references:

100,528 May 7, 1935  
104,444 May 4, 1943  
197,051 May 10, 1923  
The rejection, that is the one and also on Rojas of Linderman."

Division 55, in rejecting the same references cited the same references.

On appeal claim 42 and held in the "Rojas, Moxon" patents, and, in substance with respect to claim 57.

On appeal generally the respective examiners, but on appeal (although it did not) only Linderman's examiner's rejection of

on appeal the several limitations which are as lending patentability being italicized, as in

claims 42 and 58 quoted, supra, and each limitation is discussed, in connection with the teachings of the cited prior art. We have studied these with much care but we do not deem it necessary to set forth all the refinements embraced in appellant's arguments. The claims are similar to each other and obviously they [3] stand or fall together. Each of them contains functional statements which may not be regarded as limiting the claims, they being article claims.

[4] Taking first claim 42 for analysis and comparing it principally with the Moxon patent, the first phraseology italicized by appellant is the introductory clause to the effect that the laminated article is "adapted" for use in making a template or the like. This does not constitute a limitation in any patentable sense, but if it were in that category, it is anticipated by Moxon who teaches that his laminated sheet (made up of layers of paper and metal, united by an adhesive) may be used in making a template.

The second clause italicized is that relating to the composition of the backing element—metal stock—referring to its characteristics of thickness and rigidity. The Moxon patent discloses the use of a "thin" metal sheet which "may consist of an alloy of zinc and aluminium" to which "the [drawing] paper may be affixed in close contact with the sheet by means of an appropriate adhesive such as a waterproof glue \* \* \*."

The third and fourth italicized clauses relate to the adhesive by which the paper is bonded to the metal backing, the manner of its setting, etc., to prevent variations resulting from changes in atmospheric moisture and from heat generated during the template machining operations. No particular adhesive material is named.

It seems obvious to us that all features of claim 42 are anticipated by the Moxon patent. Heat-set adhesives are admittedly old and the selection of one suitable for use in appellant's article would not involve invention. Machining necessarily generates heat and this would be present in Moxon.

The concluding part of the claim (a part common to all the appealed claims) refers to the heat resistant temperature of the heat-set adhesive as "being well above 212° F." This is not mentioned in the specification and we find nothing to indicate that it is a critical element.

The limitations which appellant emphasizes in claims 43, 54, 56, and 57, while couched in somewhat different phraseology, do not seem to differ in any patentable sense from those in claim 42.

The feature of photographic paper is definitely shown by Linderman, who also shows that the adhesive must be of a character resistant to the solutions used in the treatment.

So far as the feature of "steel stock" mentioned in claim 56 is concerned, it may be said that the specification does not define any particular metal, and the kind used would appear to be a matter of choice, and the "thickness" feature described in the claim is not shown to be critical.

With respect to claim 58, quoted supra, it will be observed that, in the final analysis, it is specific only to photographic paper coated with adhesive, the metal plate (as is stated in the brief of the Solicitor for the Patent Office) being "mentioned inferentially" and not positively included as an element.

We agree with the tribunals of the Patent Office that claim 58 fails to define invention over Linderman, particularly in view of the teachings of the other references.

Appellant has not convinced us that there was error in the rejection of the several appealed claims, and the decision of the board is affirmed.

33 C.C.P.A. (Patents) 899

## Court of Customs and Patent Appeals

In re GREENBAUM

Appl. No. 5124 Decided Mar. 6, 1946

## PATENTS

### 1. Patentability—Anticipation—In general

It is incorrect statement of law that prior publications and patents to anticipate invention must disclose invention in such full, clear, concise, and exact terms as to enable any one skilled in art to construct invention; claims are refused since references are sufficiently clear in disclosures to show non-invention.

### Particular patents—Ointment

Greenbaum, Antiseptic Ointment, claims 3, 4, 6, and 7 of application refused.

Appeal from Board of Appeals of the Patent Office.

Application for patent of Frederick R. Greenbaum, Serial No. 452685; Patent

Inc.

mission. And these advertisements, one way or the other, to apply tension to Ethicon's suture would take those advertisements and somehow convert their admission that contradicts the actions that Ethicon itself drafted.

I find inapplicable our rule that an accused device will infringe the claimed invention as that device contains all the claimed in the patent, even if the accused device adds more steps or features. As the '557 patent emphasizes the invention having resilient legs, since that renders the claimed invention to be within the bone as soon as the anchor is inserted into the soft, cancellous layer. But as the evidence shows, the accused device does not have legs that automatically kick-out or thereby lodge the anchor within the bone, but rather merely adding a step or the invention claimed by the '557 patent. The accused device simply does not at step or feature at all, i.e., it does not have all the elements claimed by the '557 patent, e.g., *Vehicular Tech. Corp. v. Tilton Int'l, Inc.*, 141 F.3d 1084, 1089 [46 USPQ2d 1257] (Fed. Cir. 1998) (infringement if all limitations of the claim appear literally or by equivalents, in the product or process).

A majority, however, brushes aside any examination of the evidence actually by the parties. Merely disputing a matter, or even pointing to Ethicon's advertisements, should not defeat summary judgment when no reasonable juror can examine that evidence and find in favor. Because of today's decision, I think we have inadvertently and improperly set the bar for summary judgment in alleging patent infringement.

#### V.

To summarize, the specification (other than the parts themselves) does disclose the need for "tension" applied to the claimed suture in order to make the claimed anchor ready for the attachment of tissue to the bone. But nowhere do any of these claims recite this step, meaning the patentee dedicated it to the public. Ethicon, therefore, could reasonably conclude as such and lawfully use that step in its accused device.

The use of the term "comprising" should not change this reading of the patent. Our precedents have cautioned that while "comprising" is an open-ended term, it is not a tool for recapturing what the applicant had otherwise surrendered. In this case, as noted, S&N did just that, dedicating to the public the step of applying tension to the anchor member's suture. Nor should we allow a "weasel word" like "comprising" to nullify the public-dedication rule, well settled in our precedent.

Further, the limitation "lodge" or "lodging" as used in the various claims excludes the disclosed-but-unclaimed tensioning step. The specification repeatedly refers to the "resilient" nature of the claimed anchor's legs and the claims themselves indicate that these legs will "resile" or expand automatically simply because of their resiliency, i.e., no additional tensioning step is needed after all. The testimony by the inventor Dr. Hayhurst himself confirms that, indeed, a surgeon or other person practicing the '557 patent does not need to apply tension to the suture in order to make the anchor's legs dig into the bone.

Last, S&N has failed to identify any evidence that would lead a reasonable juror to conclude that Ethicon's accused method similarly or literally requires that its accused anchor also automatically kick-out the legs after entering the hole in the bone. Again, Ethicon produced the instructions it included with every package of anchors and these instructions directed surgeons to apply tension to the anchor's suture. In addition, Ethicon produced expert testing results showing that a surgeon needed to apply this tension in order to set the anchor before attaching the tissue; otherwise, the un rebutted evidence shows, unsuccessful surgeries could result and patients would not heal.

The only evidence that S&N did offer in rebuttal — advertisements drafted by a third party — could not lead a reasonable juror to reach a different outcome. Ethicon itself did not draft these advertisements and nothing in the advertisements even contradicts what Ethicon's instructions and expert testing results established beyond genuine dispute.

I respectfully dissent.

## Intermatic Inc. v. Lamson & Sessions Co.

U.S. Court of Appeals  
Federal Circuit

Nos. 00-1101, 00-1116, 01-1028

Decided December 17, 2001

### PATENTS

#### [1] Infringement — Construction of claims (§ 120.03)

##### Infringement — Literal infringement (§ 120.05)

Federal district court did not err in granting summary judgment that defendant's ribbed electrical outlet covers do not literally infringe patent in suit, since claims at issue require use of "insert" adapted to fit within "aperture" in base plate of device, since specification makes clear that "insert" is plate-like structure that fills void between aperture and electrical outlet being protected, and since finding that ribbed portion of insert on accused device, and only that portion, comprises claimed "insert" would completely distort manner in which that structure is defined in patent.

#### [2] Infringement — Defenses — Prosecution history estoppel (§ 120.1105)

Prosecution history estoppel bars infringement plaintiff from asserting that defendant's electrical outlet covers satisfy, under doctrine of equivalents, limitation in claim at issue which requires use of "insert" adapted to fit within "aperture" in base plate of claimed outlet cover, since this "insert within the aperture" limitation was added to avoid prior art, and since plaintiff therefore cannot obtain any range of equivalents for that limitation.

#### [3] Infringement — Doctrine of equivalents — In general (§ 120.0701)

##### Infringement — Defenses — Prosecution history estoppel (§ 120.1105)

Equivalence bar arising from amendment made during reexamination, which narrows scope of claim for reason related to patentability extends to all claims in which that limitation appears, even though resulting estoppel may retroactively extend to original, unamended claims, since holding otherwise would subject single limitation to multiple



"the elements" when the outlet has a cord from an electrical appliance plugged into one of its receptacles. '135 patent, col. 1, ll. 20-25. However, these covers are tailor-made to fit only a specific type of electrical outlet (e.g., single-gang-vertical; single-gang-horizontal; double-gang). *Id.* at ll. 41-51. The outlet cover claimed in the '135 patent similarly provides electrical outlets with protection from the weather, but at the same time is capable of accommodating various types of electrical outlets through the use of a base plate with an aperture, a removable insert, and a protective housing. *Id.* at col. 2, ll. 29-33.

The '135 patent contains nineteen claims, and all but claims 2 and 19 are at issue in this appeal. Of the three independent claims implicated in this appeal, two limitations contained therein are at issue. Independent claim 1 reads as follows:

1. An outdoor weatherproof protective electrical outlet cover adapted to be attached in weatherproof connection to an electrical outlet comprising:

- (a) a base plate adapted to be attached in weatherproof connection with the electrical outlet, the base plate having an aperture of sufficient size to accommodate the electrical outlet positioned in a first orientation and a second orientation wherein only one electrical outlet orientation can be accommodated at a given time;
  - (b) an insert sized and adapted to fit within the aperture of the base plate in a first orientation, the insert being of sufficient size to accommodate one electrical outlet orientation;
  - (c) a protective housing defining a closed space enclosing the electrical outlet even with at least one electrical plug present, the protective housing adapted to be mounted to the base plate.
- Id.* at col. 8, ll. 42-59 (emphasis added). Like claim 1, independent claim 12 also requires the outlet cover to have an "insert adapted to

be accommodated within the aperture of the base plate" (hereinafter, the "insert within the aperture" limitation) and a base plate having an aperture capable of accommodating an electrical outlet positioned in "a first orientation and a second orientation" (hereinafter, the "multiple orientation" limitation). *Id.* at col. 9, ll. 31-50. Claim 14, the third independent claim at issue on appeal, was altered from its original form as the result of a reexamination proceeding initiated by Lamson during the pendency of the present lawsuit. Claim 14, with the additions and deletions resulting from the reexamination proceeding indicated by underlining and brackets, respectively, reads as follows:

14. A weather resistant outlet cover for a [sic] electrical service device mounted in an electrical box comprising:

a base adapted to be mounted in a moisture resistant connection around the electrical box, said base having an aperture therein;

a housing pivotally connected to the base along an upper portion thereof and adapted to provide a moisture resistant enclosure in front of the electrical device; and

an insert adapted to be [mounted] accommodated within [sic] the aperture in the base and further in which the insert includes at least an aperture therein conforming in size and shape to the electrical service device.

U.S. Patent B1 5,280,135, col. 12, ll. 4-16. Thus, claim 14 also contains the "insert" limitation,<sup>1</sup> but does not contain the "multiple orientation" limitation.

Figure 4 [overleaf] illustrates a typical outlet cover as claimed in the '135 patent.

Although each claim utilizes different language to express the "insert within the aperture" limitation, neither party has argued that any appreciable difference exists between the language used to express that limitation in the claims at issue. We therefore interpret the "insert within the aperture" limitation identically in all of the relevant claims.

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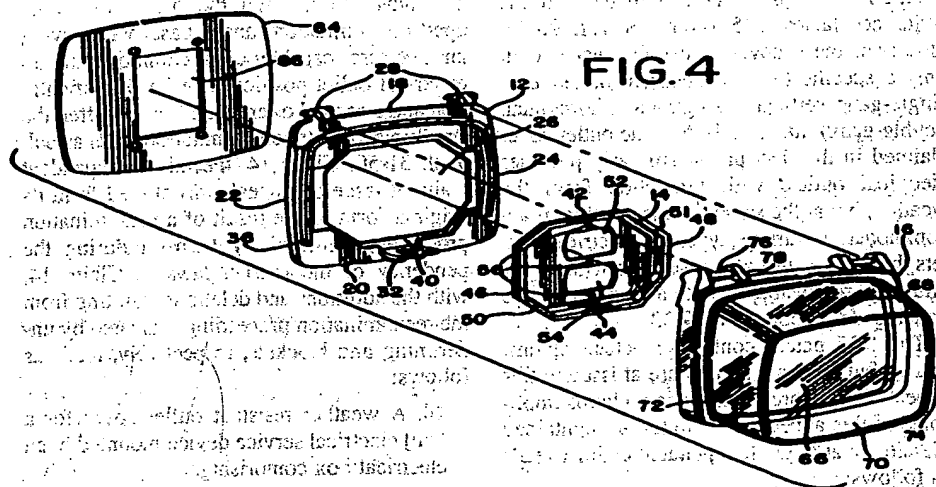
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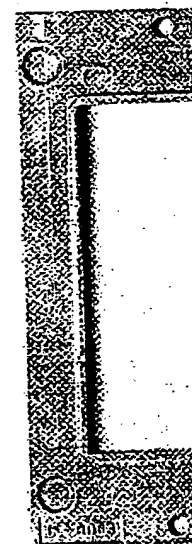




The outlet cover 10 is comprised of a base plate 12 that is mounted over the electrical outlet to be protected, wherein the base plate 12 has an aperture 26 that is large enough to encompass the plurality of styles and orientations of the plug receptacles in various electrical outlets. '135 patent, col. 2, ll. 22-26, col. 3, ll. 26-28. The insert 14 is then fitted within the aperture 26 of the base plate 12 in a flush manner to provide, in cooperation with the flange 50 and the raised ledge 51, a secure connection that protects the outlet from a variety of weather conditions. *Id.* at col. 4, ll. 5-15. The insert 14 may be placed in a variety of orientations, depending on the type of electrical outlet to be protected. *Id.* at col. 2, ll. 29-33. The protective housing 16 is mounted over the base plate 12 to define a closed space of sufficient size to envelop an electrical outlet with at least one plug engaged in a plug receptacle of that outlet. *Id.* at ll. 35-39.

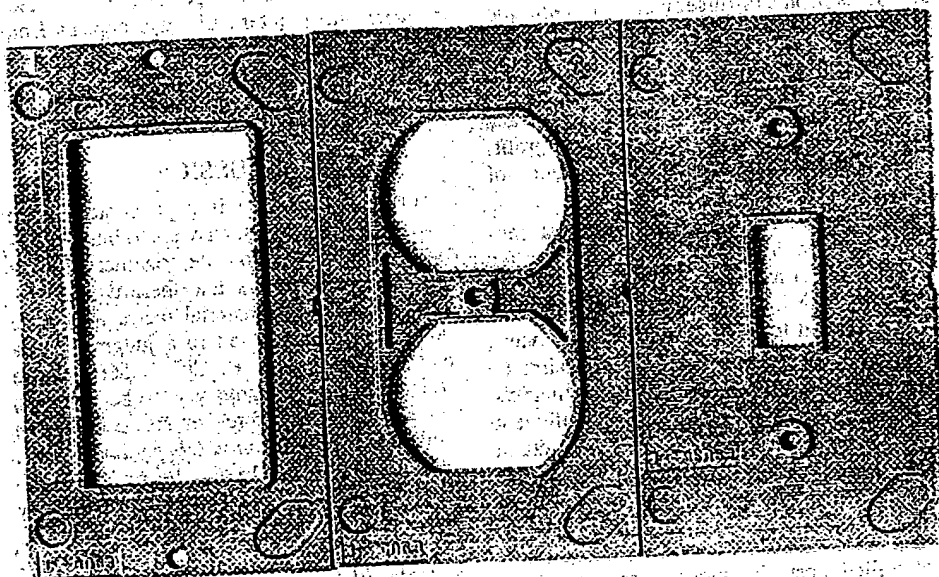
Lamson manufactures a number of weatherproof electrical outlet covers, each of which

utilizes a base plate, a protective housing, and either one or two inserts, depending on the type of electrical outlet to be protected. *Intermatic Inc. v. Lamson & Sessions Co.*, No 94-C-50295, slip op. at 3 (N.D. Ill. Mar. 30, 1999) (order). However, Lamson's outlet covers differ from the outlet cover claimed in the '135 patent in two respects that form the heart of the present infringement dispute. First, the inserts of Lamson's outlet covers do not fit within the aperture of the base plate 12. Rather, each insert contains ribs that outline the general configuration of the outlet receptacles it is intended to cover, wherein the ribs extend into the aperture from the rear wall of the insert 14. No other portion of the insert extends into the aperture. Second, all of Lamson's covers are designed to be used with either horizontally oriented outlets or vertically oriented outlets, but a single outlet cover is not capable of accommodating both types of outlets. The following photograph illustrates a number of Lamson's "ribbed" inserts:



Intermatic file ing that the fol fringed the '1 E9UV(G,W,C) cover; (2) Lam vertical single-g son's E9U2(G cover,<sup>2</sup> and (4) l zontal single-ga the "ribbed pro court construed ture" limitation "have an outer smaller than the ture, and does i raised ledge s ture." *Interma Co.*, No 94-C-5 (N.D. Ill. Feb. court also con tion" limitation with apertures both horizontal

<sup>2</sup> This product i redesigned double accused of infrin



Intermatic filed suit against Lamson alleging that the following Lamson products infringed the '135 patent: (1) Lamson's E9UV(G,W,C) vertical single-gang outlet cover; (2) Lamson's E9UDV(G,W,C) deep vertical single-gang outlet cover; (3) Lamson's E9U2(G,W,C) double-gang outlet cover;<sup>2</sup> and (4) Lamson's E9UH(G,W,C) horizontal single-gang outlet cover (hereinafter, the "ribbed products"). *Id.* at 2-3. The district court construed the "insert within the aperture" limitation to require that the insert have an outer dimension conforming to or smaller than the outer dimension of the aperture, and does not include the flange and the raised ledge so as to fit within the aperture. *Intermatic Inc. v. Lamson & Sessions Co.*, No 94-C-50295, 1999 WL 102767, at \*2 (N.D. Ill. Feb. 9, 1999) (order). The district court also construed the "multiple orientation" limitation to include not only base plates with apertures large enough to accommodate both horizontally and vertically-oriented elec-

trical outlets with a single insert, but also those able to accommodate orientations 180 degrees apart from one another. *Id.* at \*1. In light of its claim construction, the court granted Lamson's motion for summary judgment that the ribbed products did not literally infringe the '135 patent, but denied Lamson's motion as to infringement under the doctrine of equivalents. *Intermatic Inc. v. Lamson & Sessions Co.*, No 94-C-50295, 1999 WL 181977, at \*5 (N.D. Ill. Mar. 30, 1999) (order). Thereafter, the jury found that Lamson's ribbed products infringed claims 1, 3, 4, 6-9, and 11-18 under the doctrine of equivalents, and found dependent claims 6, 9, and 11 invalid for obviousness. *Intermatic I.*

During the damages phase of the trial, the district court refused to allow Lamson to introduce evidence of its recently redesigned line of outlet covers utilizing inserts not having a ribbed portion (hereinafter, the "ribless products") in order to demonstrate the existence of noninfringing substitutes. *Intermatic Inc. v. Lamson & Sessions Co.*, No 94-C-50295 (N.D. Ill. Aug. 27, 1999) (order). The court also refused to allow Intermatic to present certain evidence concerning the

<sup>2</sup> This product number refers to both the original and redesigned double-gang outlet cover, both of which are accused of infringing the '135 patent.

ive housing, and depending on the protected. *Intermatic Co.*, No 94-D-111, Mar. 30, 1999. Lamson's outlet cover claimed in the at form the heart dispute. First, the covers do not fit base plate. *Id.* ribs, that outline the outlet recep- wherein the ribs n the rear wall of tion of the insert cond, all of Lam- be used with el- outlets or vertically- le outlet cover is ting both types of ograph illustrates a sd" inserts.



amount of future damages it will incur as a result of Lamson's infringement. *Intermatic Inc. v. Lamson & Sessions Co.*, No 94-C-50295 (N.D. Ill. Sept. 20, 1999) (order). The jury found that Lamson willfully infringed the '135 patent by selling its ribbed products, and awarded Intermatic damages for lost profits and price erosion in the amount of \$12,500,000. *Intermatic I*.

Both parties filed multiple post-trial motions. Lamson filed a combined motion for JMOL or for a new trial on the grounds that, *inter alia*: (1) independent claims 1 and 12 must be found to have been obvious in view of the jury's finding that dependent claims 6, 9, and 11 were obvious; (2) Intermatic's equivalence evidence was legally insufficient and that, in any event, its equivalence claim was barred by prosecution history estoppel; (3) Intermatic was not entitled to lost profits; and (4) the district court erroneously excluded evidence of Lamson's ribless products. Intermatic filed post-trial motions seeking, *inter alia*: (1) enhanced damages; (2) attorney fees; and (3) JMOL that dependent claims 6, 9, and 11 would not have been obvious over the prior art in light of the jury's answers to special interrogatories that formed the basis for its non-obviousness verdict with respect to claims 1 and 12. The district court denied Lamson's combined motion for JMOL and for a new trial in all respects, but granted Intermatic's motion for JMOL that claims 6, 9, and 11 are not invalid for obviousness. *Id.*

Shortly after the district court entered judgment in *Intermatic I*, Intermatic filed suit against Lamson alleging that Lamson's ribless products, the very same products excluded from trial in *Intermatic I*, infringed the '135 patent. *Intermatic II* at \*1. The district court granted Lamson's motion for summary judgment of noninfringement because it determined that, under its construction of the "insert within the aperture" limitation in *Intermatic I*, Lamson did not literally infringe as a matter of law, and prosecution history estoppel barred a finding of infringement under the doctrine of equivalents. *Id.* at \*1-2.

Lamson appeals from the district court's denial of its motion for JMOL of noninfringement, as well as from the court's grant of Intermatic's motion for JMOL that claims 6, 9, and 11 are not invalid for obviousness, in *Intermatic I*. Intermatic cross-appeals the court's exclusion of its future damages evidence and

denial of enhanced damages and attorney fees in *Intermatic I*. Intermatic also appeals from the district court's grant of summary judgment of noninfringement in *Intermatic II*. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1).

### DISCUSSION

Summary judgment is appropriate "if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." Fed. R. Civ. P. 56(c). "The evidence of the nonmovant is to be believed, and all justifiable inferences are to be drawn in his favor." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986). We review a district court's grant of a motion for summary judgment *de novo*. *Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp.*, 149 F.3d 1309, 1315, 47 USPQ2d 1272, 1275 (Fed. Cir. 1998).

Judgment as a matter of law ("JMOL") is appropriate when "a party has been fully heard on an issue and there is no legally sufficient evidentiary basis for a reasonable jury to find for that party on that issue." Fed. R. Civ. P. 50(a)(1). We review a district court's grant or denial of a motion for JMOL *de novo*, reapplying the JMOL standard used by the district court. *Sextant Avionique, S.A. v. Analog Devices, Inc.*, 172 F.3d 817, 824, 49 USPQ2d 1865, 1869 (Fed. Cir. 1999). To prevail, an appellant "must show that the jury's findings, presumed or express, are not supported by substantial evidence or, if they were, that the legal conclusion(s) implied from the jury's verdict cannot in law be supported by those findings." *Perkin-Elmer Corp. v. Computervision Corp.*, 732 F.2d 888, 893, 221 USPQ 669, 673 (Fed. Cir. 1984) (citation omitted).

A determination of infringement requires a two-step analysis. "First, the court determines the scope and meaning of the patent claims asserted . . . and then the properly construed claims are compared to the allegedly infringing device." *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1454, 46 USPQ2d 1169, 1172 (Fed. Cir. 1998) (en banc) (citations omitted). Literal infringement requires that every limitation of the patent claim be found in the accused device. *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 821, 23 USPQ2d 1426, 1431 (Fed. Cir. 1992). "An accused device that does not

literally infringe the doctrine of the claim either literally F.3d at 1459, construction is an *view Instrum* 34 USPQ2d 1 banc), *aff'd*, 5 (1996), that v F.3d at 1456, tion of infrin the doctrine fact. *SRI Int Am.*, 775 F.2 589 (Fed. Cir plicability of legal question 138 F.3d at 1

### A. Claim C

#### 1. The "t tion

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each claim in a patent is presumptively different in scope. *Comark Communications, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187, 48 USPQ2d 1001, 1005 (Fed. Cir. 1998). This presumption can be strengthened under certain circumstances. One of those circumstances was espoused in *Wenger Manufacturing, Inc. v. Coating Machinery Systems, Inc.*, wherein this court stated that "[c]laim differentiation, while often argued to be controlling when it does not apply, is clearly applicable when there is a dispute over whether a limitation found in a dependent claim should be read into an independent claim, and that limitation is the only meaningful difference between the two claims." 239 F.3d 1225, 1233, 57 USPQ2d 1679, 1685 (Fed. Cir. 2001). Because the only meaningful difference between claim 1 and claim 3 involves the potential orientations of the insert, the doctrine of claim differentiation provides additional support for not limiting the "multiple orientation" limitation to the construction proposed by Lamson. We therefore conclude that the district court did not err in interpreting the "multiple orientation" limitation to include one hundred-eighty degree rotations of the insert.

## 2. The "insert within the aperture" limitation

Although Lamson's products were found to have satisfied the "insert within the aperture" limitation under the doctrine of equivalents, Intermatic argues that that limitation is literally met under the proper interpretation of its claims. Intermatic contends that the district court erred in its construction of the "insert within the aperture" limitation by excluding a preferred embodiment of the invention, and that the proper interpretation of that limitation is that the claimed "insert" is comprised of not only what it styles as the "insert plate," which is what the district court found to be the actual "insert," but also includes the flange and the raised ledge connected to it. Lamson responds that the court properly construed the "insert within the aperture" limitation to exclude the flange and the raised ledge because the specification teaches that those structures are separate from the claimed "insert."

We conclude that the district court properly construed the "insert within the aperture" limitation to exclude the flange and the raised ledge. When the meaning of a term used in a claim is sufficiently clear from its definition in

the patent specification, that meaning shall apply. *Multiform Desiccants, Inc. v. Medzam, Ltd.*, 133 F.3d 1473, 1477, 45 USPQ2d 1429, 1432 (Fed. Cir. 1998); *Intellicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1388, 21 USPQ2d 1383, 1387 (Fed. Cir. 1992). The specification states that

[t]he insert 14 has a top edge 42, a bottom edge 44 and two side walls 46 and 48. A flange 50 extends around the periphery of the insert. The flange 50 is sized and adapted to fit securely within the recess 40 of the base plate 12 in order to form a connection with the base plate 12. A raised ledge 51 is located on the face of the insert 14 around the periphery of the aperture 26 and flange 50.

'135 patent, col. 4, ll. 5-12 (emphasis added). The specification therefore makes clear that the claimed "insert" is something separate from, but connected to, the flange and the raised ledge. Accordingly, the district court did not err in interpreting the "within the aperture" limitation to require the plate-like structure comprising the "insert," which does not include the flange and raised ledge, to fit within the aperture of the base plate.

## B. Literal Infringement

Intermatic argues that the district court erred by granting summary judgment that the ribbed products do not literally infringe the '135 patent in *Intermatic I*. Intermatic contends that even under the district court's construction of that limitation, which we affirm in the immediately preceding section, Lamson's ribbed outlet covers literally infringe the '135 patent. Intermatic argues that the ribbed portion of Lamson's insert, which fits completely within the aperture, comprises the claimed "insert," while the remaining portion of the insert is akin to the flange and the raised ledge, which is considered separate from the "insert" under the district court's construction.

[1] Intermatic's argument is not persuasive. To view the ribbed portion of Lamson's inserts, and only that portion, as comprising the claimed "insert" completely distorts the way that structure is defined in the '135 patent. Although, as discussed above, the specification explains that the "insert" is separate from the flange and the raised ledge, that passage cannot be read to support the view that anything within the aperture of the base plate is the "in-

sert," while anything analogous to the flange. If that were the case, any portion with the "insert" within the aperture would satisfy the "insert within the aperture" limitation. The specification of the "insert" is the plate to fill the void between the base plate and the aperture. See *id.* at col. 1. Intermatic rejects this strained construction. The district court did not err in its primary judgment that the district court did not literally infringe the '135 patent as a matter of law.

## C. Infringement under the Doctrine of Equivalents

### 1. Lamson's rib

Lamson argues that the district court erred by allowing the jury to find that the ribbed weatherproof '135 patent under the doctrine of equivalents. Lamson contends that the district court's finding that the ribbed portion of the insert within the aperture

Intermatic responds that the district court's finding supports the doctrine of equivalents. Intermatic argues at trial that the ribs are the same mounting structure as the "insert within the aperture," and that the weatherproofing is the same way. Intermatic's motion history estoppel of equivalence, and applicable estoppel in claim 14.

[2] Claim 14, as amended, recites that the "insert [be] the base . . ." *Id.* at col. 1. As was the case with the claims of the '135 patent during the initial examination, the district court substantially the same. During reexamination, the district court rejected that claim as prior art. Intermatic amended the insert to be "ada-

sert," while anything outside of the aperture is analogous to the flange and the raised ledge. If that were the case, then any structure having any portion within the aperture would satisfy the "insert within the aperture" limitation. The specification makes clear that the "insert" is the plate-like structure that serves to fill the void between the aperture in the base plate and the electrical outlet being protected. See *id.* at col. 3, ll. 59-62. We therefore reject this strained application of that limitation to the accused device, and conclude that the district court did not err in granting summary judgment that Lamson's ribbed products do not literally infringe the '135 patent as a matter of law.

### C. Infringement under the Doctrine of Equivalents

#### 1. Lamson's ribbed outlet covers

Lamson argues that the district court erred by allowing the jury to determine whether its ribbed weatherproof outlet covers infringe the '135 patent under the doctrine of equivalents. Lamson contends that prosecution history estoppel bars Intermatic from claiming that the ribbed portion of its inserts satisfies the "insert within the aperture" limitation.

Intermatic responds that substantial evidence supports the jury's finding of equivalence. Intermatic argues that it demonstrated at trial that the ribs in Lamson's inserts serve the same mounting and weatherproofing functions as the "insert within the aperture" limitation, and that the ribs achieve the same weatherproofing result in substantially the same way. Intermatic also argues that prosecution history estoppel does not bar its assertion of equivalence, and that, in any event, any applicable estoppel is limited to reexamined claim 14.

[2] Claim 14, as originally filed, required that the "insert [be] adapted to be mounted in the base." *Id.* at col. 10, l. 11. That claim, as was the case with the remainder of the claims of the '135 patent, was not amended during the initial prosecution and issued in substantially the same form set forth above. During reexamination, however, the examiner rejected that claim because he determined that certain prior art references read on the "mounted in the base" phrase. In response, Intermatic amended claim 14 to require that the insert be "adapted to be accommodated

with[in] the aperture in the base," and argued that the claim as amended was patentable over the prior art. Thereafter, the examiner determined that claim 14 was in condition for allowance, and the United States Patent and Trademark Office issued a reexamination certificate containing the amendment. U.S. Patent B1 5,280,135, col. 2, ll. 4-16.

When an amendment narrows the scope of a claim for a reason relating to patentability, no range of equivalents is available for that amended claim limitation. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 234 F.3d 558, 569, 576, 56 USPQ2d 1865, 1872, 1878 (Fed. Cir. 2000) (en banc), cert. granted, 121 S. Ct. 2519 (U.S. June 18, 2001) (No. 00-1543). Accordingly, because the "insert within the aperture" limitation in reexamined claim 14 was added for a reason relating to patentability, i.e., to avoid the prior art, Intermatic is barred from obtaining any range of equivalents for that limitation.

Furthermore, that equivalence bar extends to all of the claims in which the "insert within the aperture" limitation appears. In *Builders Concrete, Inc. v. Bremerton Concrete Products Co.*, this court addressed the question whether prosecution history estoppel applies to a claim containing a limitation that was added to another, separate claim to avoid prior art, where that limitation appeared in the claim in its original form and was not amended during prosecution. 757 F.2d 255, 225 USPQ 240 (Fed. Cir. 1985). In *Builders*, a "passage" limitation was incorporated into independent claim 1 from dependent claim 2 during prosecution to avoid a prior art rejection. *Id.* at 259, 225 USPQ at 243. Claim 10, a separate independent claim, also contained the "passage" limitation as originally filed, and thus did not require any amendment to place that claim in condition for allowance. *Id.* In addressing whether the estoppel resulting from the amendment to claim 1 also applied to claim 10, the court stated:

Although claim 10 is the only claim in suit, the prosecution history of all claims is not insulated from review in connection with determining the fair scope of claim 10. To hold otherwise would be to exalt form over substance and distort the logic of this jurisprudence, which serves as an effective and useful guide to the understanding of patent claims. The fact that the "passage" clause of patent claim 10 was not itself amended



aperture" limitation under *Festo*.<sup>3</sup> The court determined in section 1037 that the ribbed products do not have an "insert within the aperture" and concluded that no found means that those products do not infringe the '135 patent as a matter of law. Finally, we conclude that the district court in denying Lamson's motion for JMOL of noninfringement was not in error. We determined that Lamson's motion did not meet the "insert within the aperture" limitation. On appeal, we need not address the district court's failure to satisfy the "multiple" limitation.

#### ess outlet covers

We argue that Lamson's ribbed products literally infringe the '135 patent as discussed above. Indeed to any range of equivalence, the "within the aperture" limitation. The district court therefore did not err in its summary judgment in *Intermatic*.<sup>4</sup> The ribless outlet covers do not infringe the '135 patent.

The district court determined that none of the ribbed products infringe the '135 patent. It granted a counterclaim of invalidity and a request for a declaratory judgment of noninfringement. Lamson's counterclaim in *Chem. Co. v. Morton Int'l*, 6, 26 USPQ2d 1721, 1727 (Fed. Cir. 1991), is a finding of noninfringement (a counterclaim seeking a finding of invalidity) and we reverse the inconsistent obviousness. The issue of inconsistent obviousness is not a procedural issue that is not subject to summary judgment. The district court's summary judgment in part, while agreeing that the district court's summary judgment was created by an amendment to all unamended claims contained in the amended complaint, argues that the unamended claim is entitled to a range of equivalence subject matter not relinquished by the district court's summary judgment. The district court thus contends that the limitation was amended in the amended complaint, but that any claim under the flexible bar approach would be entitled to see a basis for that distinction.

unique to patent law. Thus, this court applies the law of the regional circuit, in this case the Seventh Circuit, to the issue of inconsistent verdicts. *Mycogen Plant Sci., Inc. v. Monsanto Co.*, 243 F.3d 1316, 1325, 58 USPQ2d 1030, 1037 (Fed. Cir. 2001).

The jury provided answers to twenty-three special interrogatories directed to the obviousness *vel non* of the disputed claims of the '135 patent. *Intermatic Inc. v. Lamson & Sessions Co.*, No. 94-C-50295 (N.D. Ill. Oct. 20, 1999) (order). After answering the interrogatories, the jury found all of the independent claims to be not invalid for obviousness; however, the jury did find dependent claims 6, 9, and 11 to be invalid. *Id.* Thereafter, upon Intermatic's motion for JMOL, the district court determined that the jury's findings with respect to claims 6, 9, and 11 conflicted with their findings regarding the independent claims and their special interrogatory answers, and granted JMOL that claims 6, 9, and 11 are not invalid for obviousness. *Id.*

Lamson argues, citing *Stone v. City of Chicago*, 738 F.2d 896 (7th Cir. 1984), that because the jury verdicts are incompatible, and that because there was ample evidence suggesting that all of the claims of the '135 patent are invalid for obviousness, the district court erred by failing to order a new trial. Intermatic responds that the district court correctly used the jury's special interrogatory answers to resolve the conflict between the verdicts under Federal Rule of Civil Procedure 49(b), and that the court properly confirmed the validity of all of the claims of the '135 patent as a matter of law.

[4] The rule set forth in *Stone* is inapplicable to the case at hand, as that rule is only implicated where verdicts are "logically incompatible" to the extent that they cannot be reconciled by reference to the evidence supporting them. *Stone*, 738 F.2d at 899. Rule 49(b), on the other hand, deals, *inter alia*, with the situation in which two general verdicts are inconsistent with one another, but the differences between them can be resolved by referring to the jury's answers to the special interrogatories underlying those verdicts. Rule 49(b) provides in relevant part that:

When the [interrogatory] answers are consistent with each other but one or more is inconsistent with the general verdict, judgment may be entered pursuant to Rule 58 in accordance with the answers, notwithstanding the general verdict, or the court may return the jury for further consideration of its answers and verdict or may order a new trial.

ment may be entered pursuant to Rule 58 in accordance with the answers, notwithstanding the general verdict, or the court may return the jury for further consideration of its answers and verdict or may order a new trial.

Fed.R.Civ.P. 49(b). Thus, the district court has three options when faced with an inconsistent general verdict based on consistent special interrogatory answers. The court may: (1) order the jury to consider its answers further; (2) order a new trial; or (3) harmonize the verdict with the answers. *Campbell v. Ingersoll Milling Mach. Co.*, 893 F.2d 925, 930 (7th Cir. 1990). In the case at hand, the jury's answers overwhelmingly indicate that the prior art does not disclose an insert "within the aperture," as required by independent claims 1, 12, and 14. Therefore, because dependent claims 6, 9, and 11 each contain the "insert within the aperture" limitation, in addition to other limitations that further differentiate those claims from their respective independent claims, *see* 35 U.S.C. § 112, ¶ 4 (1994), it follows *a fortiori* that those claims are also not invalid over the cited prior art. *Hartness Int'l, Inc. v. Simplimatic Eng'g Co.*, 819 F.2d 1100, 1108, 2 USPQ2d 1826, 1831 (Fed. Cir. 1987). Accordingly, we conclude that the district court did not err in granting JMOL that neither dependent claims 6, 9, and 11 nor any of the remaining disputed claims of the '135 patent are invalid for obviousness.

Because we reverse on infringement, the remaining issues concerning the exclusion of evidence, damages, and attorney fees are moot.

#### CONCLUSION

The district court erred in denying Lamson's motion for JMOL of noninfringement of the ribbed products in *Intermatic I*. However, the court correctly granted Intermatic's motion for JMOL that claims 6, 9, and 11 of the '135 patent are not invalid for obviousness. Finally, the district court properly granted summary judgment of noninfringement of the ribless products in *Intermatic II*. Accordingly, with respect to *Intermatic I*, we

**AFFIRM-IN-PART and REVERSE-IN-PART.**



As to *Intermatic II*, we

**AFFIRM:**

Newman, J., concurring in the judgment, dissenting in part.

On review of the facts and law of this case, I reach the same result as does the court. However, I do not endorse the new ruling that an unamended claim is barred from access to any degree of equivalency simply because a broader claim was amended during prosecution.

It has long been the law that estoppel affects the scope of equivalents available to an unamended claim, when a broader claim is amended for reasons of patentability. That was the holding in *Builders Concrete, Inc. v. Bremerton Concrete Products Co.*, 757 F.2d 255, 260, 225 USPQ 240, 243 (Fed. Cir. 1985), and reflects the traditional rules of estoppel. It is properly applied in reexamination, as the court's opinion explains. However, the court today enlarges that estoppel to enhance the absolute bar of *Festo*, even though the claim was not amended. The court thus holds that the amendment of a broader claim bars access to any scope of equivalency as to the unamended narrower claim, whether or not the accused infringer is practicing subject matter that was required to be relinquished. In *Festo*, this court did not go so far. I see no need to do so in order to respect the principles of *Festo*.

*Festo* does not prevent an unamended claim from serving as a source of equivalency, subject to estoppel against recovering by equivalency the subject matter that was relinquished in order to achieve patentability of a different claim. This decision, by extending the *Festo* absolute bar to such unamended claims, will give the coup de grace to this vestige of the doctrine of equivalents. The consequences for patent prosecution, with its traditional presentation of claims of diminishing scope, have not been explored by the parties or by the court. I respectfully dissent from the majority's ruling on this aspect.

**M-5 Steel Mfg. Inc. v. O'Hagin's Inc.**

**U.S. Patent and Trademark Office  
Trademark Trial and Appeal Board**

Oppositions Nos. 109,470, 109,471, and 109,741

Decided September 26, 2001

Released October 3, 2001

**TRADEMARKS AND UNFAIR TRADE PRACTICES**

[1] Practice and procedure in Patent and Trademark Office — Interpartes proceedings — Opposition and cancellation — In general (§ 325.0305.01)

**JUDICIAL PRACTICE AND PROCEDURE**

Procedure — Defenses — Estoppel (§ 410.1805)

Opposer is not contractually estopped from opposing trademark registration applications involved in present opposition proceeding, since final settlement agreement between applicant and opposer specifically exempts opposition proceedings from its terms, and supersedes all previous agreements, including letter agreement stating that opposer would not challenge these applications.

**TRADEMARKS AND UNFAIR TRADE PRACTICES**

[2] Registration and its effects — Non-registrable subject matter — In general (§ 315.0401)

Types of marks — Trade dress as mark — Functionality (§ 327.0706)

Applicant's product designs for roof vents are functional, and registration of designs therefore would place competitors at substantial disadvantage, even though designs do not improve venting function, since these designs blend in or match roof tiles with which they are used better than alternative products, since designs are compatible with roof tiles with which they are used and supply applicant with competitive advantage, and since applicant's utility patent application, promotional literature, and testimony tout designs' unobtrusive

appearance, and existence of vent and are cheaper

[3] Registrable  
registrable  
tive; de  
(§ 315.0407)

Types of mar  
— Seconda

Applicant has product designs distinctiveness, s including oppos substantially similar testimony shows other companies since applicant l clusive use of the no evidence that sserted product d consumers have designs as indic plicant's sales m commercial succe dence alone doe designs have bec goods.

Consolidated brought by M-5 : cations of O'Ha product design n metal ventilating concrete roofs ( 177,082, and 75/ 1996). Oppositio Jay S. Kopelo ciates, San Diego William J. Ar Jones, Santa Ros Before Simms ministrative trade

Simms, J.  
M-5 Steel Mfg corporation, has O'Hagin's Inc. ( corporation, to re product design n

In *Kregos* and *Lipton*, the seller represented that they held certain works; they did not make claims regarding who originated the works. In fact, in *Kregos* the Court held that, "[plaintiff] could compare the features unfairly competitively, falsely claiming that its form was by some well-known baseball player." 937 F.2d at 710.

At setting here is more analogous to *Kregos* and *Lipton* than it is to placing the "Compagnie Internationale" label in the sweaters it did not represent that it had made sweaters. Rather, like the *Kregos* and *Lipton*, Express stated that it had the right to sell the sweaters. The evidence at trial that retail clothing stores routinely place their labels on clothing sold in the store at 428. In light of *Kregos* the Court declines to find this asserted practice actionable under the Lanham Act.

Finally, there was no "legally sufficient basis" for the jury's verdict for false designation of origin.

Notion for judgment as a matter of law. Banff's claim for actual damages under the Copyright Act is denied. However, a new trial on this claim. The jury's award of Express' motion for judgment as a matter of law on Banff's trade dress claim is denied; this holding be reversed on Express' motion for judgment as a matter of law on Banff's claim for

some language in *Waldman*, which even in the absence of any affirmative statement, § 43(a) prohibits a defendant from publishing another's work without permission. *See Waldman*, 43 F.3d at 782 ("It is not that it would constitute a false designation to publish without attribution to its author that is original enough to deserve protection"). This *dictum* appears in the Second Circuit's reasoning in *Waldman* that the Court declines to follow it. The Court's decision on this claim is made by its understanding of Second Circuit precedent. The Court does not believe it made any erroneous factual findings in its claim. Accordingly, if the Court grants this part of Express' motion for a new trial, a matter of law is reversed, a new trial would not be warranted.

false designation of origin is granted? However, in the event that this holding is reversed on appeal, the Court finds that no new trial is warranted.

#### SO ORDERED.

#### U.S. Court of Appeals Federal Circuit

Blumenthal v. Barber-Colman Holdings Corp.

Nos. 93-1005, -1006

Decided July 31, 1995  
(Unpublished)

#### PATENTS

##### 1. Patent construction — Claims — Defining terms (§125.1305)

Term "adapted to guide the electrolyte" in claim for oxygen sensing probe must be construed to mean that tapered shape of second electrode of probe guides or positions electrolyte as it is inserted into electrode during assembly, since specification compels conclusion that clause in which phrase appears is directed toward assembly of probe rather than its operation, since two figures in patent drawings indicate that tapered walls of second electrode could not facilitate maintenance of electrolyte contact during operation, and since specification does not support suggestion that tapered side walls serve need to obtain ventilation of contact zone by furnace gases during probe operation.

##### 2. Infringement — Construction of claims (§120.03)

##### Infringement — Doctrine of equivalents — In general (§120.0701)

Federal district court properly granted summary judgment that accused oxygen sensing probes do not infringe asserted claim for patented probe under doctrine of equivalents, since defendants submitted declarations tending to show that structure of accused probes is tubular and does not contain

Because the Court has disposed of both of Banff's § 43(a) claims, Banff's request for attorney fees under the Lanham Act must also be denied.

tapered surface, and that accused probes are consequently noninfringing, since declaration submitted in response by plaintiffs fails to counter defendants' evidence regarding structure and assembly of accused probes, misconstrues pertinent limitation of claim at issue, and applies that limitation to noncorresponding structure in accused probes, and since plaintiffs therefore failed to establish existence of genuine issue of material fact as to whether accused probes meet pertinent limitation of asserted claim under doctrine of equivalents.

##### Particular patents — Chemical — Oxygen sensor

4,588,493; Blumenthal, hot gas measuring probe, summary judgment of noninfringement affirmed.

Appeal from the U.S. District Court for the Northern District of Illinois, Reinhard, J.

Action by Robert N. Blumenthal and Andreas T. Melville against Barber-Colman Holdings Corp., Barber-Colman Co., and Surface Combustion Inc. for patent infringement. From summary judgment of noninfringement, plaintiff appeals, and defendant cross-appeals from denial of request for sanctions and attorneys' fees. Affirmed; Newman, J., dissenting in separate opinion.

[Editor's Note: The Court of Appeals for the Federal Circuit has indicated that, "pursuant to Fed. Cir. R. 47.6, this order is not citable as precedent. It is a public record."]

William J. Schramm, of Reising, Ethington, Bernard & Perry, Troy, Mich.; Daniel D. Ryan, of Ryan, Maki & Hohenfeldt, Milwaukee, Wis., for plaintiffs.

Charles S. Oslakovic and Charles H. Motier, of Leydig, Voit & Mayer, Chicago, Ill.; Jules Jay Morris, of Foxboro Co., Foxboro, Mass., for defendants.

Before Newman, Michel, and Schall, circuit judges.

Schall, J.

#### DECISION

Robert N. Blumenthal and Andreas T. Melville ("Blumenthal") appeal from the decision of the United States District Court for the Northern District of Illinois in docket number 90 C 20365 (N.D. Ill. Aug. 7, 1992). The district court granted summary judgment of non-infringement of Blumenthal's

## DISCUSSION

In determining whether summary judgment should be granted on the question of infringement, the trial court must first construe the claims, deciding the meaning and scope of any disputed terms in the claims as a matter of law. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 34 USPQ2d 1321 (Fed. Cir. 1995) (*in banc*). We review *de novo* the district court's construction of the claims. *Id.* The claims as construed by the court are then applied to the accused device. If there remain any disputed factual issues concerning whether the claims as construed are infringed by the accused device, literally or in accordance with the doctrine of equivalents, summary judgment is not appropriate unless the movant must prevail even on the non-movant's version of the facts. See *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986).

Clause b. of claim 9 recites that "the second electrode defines a frusto-conical interior surface terminating in a grooved flat adapted to guide the electrolyte and a central opening in said electrode flat." Col. 10, lines

[1]. We hold that the district court properly construed clause b. The specification compels the conclusion that clause b is directed toward assembly of the probe, rather than its operation. Referring to an embodiment of the invention reflected in claim 9, the "Summary of the Invention" section of the specification states that the second electrode has "projecting converging walls which guide the flat end of a tubular electrolyte to positively position the electrolyte over a central aperture in a flat portion." Col. 4, lines 36-38. Referring to the same embodiment, the "Description of the Invention" section states that "[t]he outer diameter of the electrolyte tube is slightly less than the diameter of the grooved flat surface . . . so as to be centrally guided by the tapered surface." Col. 7, lines 51-53. Referring to another embodiment, the description states that "the flat end of the electrolyte tube . . . is guided into position against the flat area . . . by the taper in the anode converging walls." Col. 8, lines 34-37. This sentence indicates that the function of the tapered walls of the second electrode is to facilitate the act of putting the electrolyte tube into contact with the second electrode.

For the foregoing reasons, the court concludes that the district court's decision to grant summary judgment on the basis of the clause b of claim 1 is not supported by the evidence. The court therefore grants summary judgment on the basis of the clause b of claim 1, rather than on the basis of the clause a of claim 1. The question then becomes whether the court should grant summary judgment on the basis of the clause b of claim 1, that constructive use of the word "and" in the clause b of claim 1, the existence of the word "and" in the clause b of claim 1, the fact so as to define the word "and" in the clause b of claim 1, for summary judgment, is not.



clause b, the district court found that the specification guides an electrolyte tube into position against the flat area of the second electrode, but the district court's construction of the specification is flawed. The specification in claim 9 can be read as meaning that the tapered walls of the second electrode are adapted to guide the electrolyte tube into position against the flat area of the second electrode. The specification in the patent does not specifically call for a tapered wall adapted to guide the electrolyte tube into position against the flat area of the second electrode. The district court's construction of the specification is flawed because it refers to an electrolyte tube being guided by a taper, . . . the frusto-conical aspect of the specification pertains to the electrolyte tube and not the second electrode. The district court agreed with Barber-Colman's argument that the tapered walls of the second electrode guides or positions the electrolyte tube into position against the flat area of the second electrode. The specification does not support Blumenthal's suggestion that the need to obtain ventilation of the zone of contact by furnace gases during operation of the probe is served by the tapered side walls of the second electrode. Rather, the specification refers generally to gas being exchanged "through the openings in the electrode plate." Col. 4, lines 21-22. In addition, with reference to figures 3, 3a, and 4a, the specification states that "gas can flow or is exchanged, for example, through or from opening 27 and holes 41, along the grooves 39 and electrolyte end 33, through the annular space between the cylindrical surface 25 and outer surface of electrolyte tube 28." Col. 8, lines 3-8. Finally, in connection with its response to Barber-Colman's motion for summary judgment, Blumenthal stated "Agreed" with respect to the following statement by Barber-Colman in support of the motion: "In the patented probe, a tapered guideway engages the end of the electrolyte and, if that end is off center, guides or translates it toward the center of the sheath as the electrolyte tube is inserted into the sheath to its seated position." This is precisely the kind of guiding function that the district court concluded the tapered walls of the second electrode would provide. For the foregoing reasons, we conclude that the district court properly construed clause b of claim 9 as relating to assembly, rather than operation, of the probe. The question then becomes whether, in light of that construction, Blumenthal established the existence of a genuine issue of material fact so as to defeat Barber-Colman's motion for summary judgment. We hold that it did not.

("guided into position against the flat area"). We do not read these statements as referring to facilitating the act of holding the electrolyte tube in place during operation of the probe, as Blumenthal does.

Figures 3 and 4a on sheet 1 of the patent drawings — which is attached — weigh heavily against the construction of the term "guide the electrolyte" urged by Blumenthal. Each of the figures shows a gap between the tapered wall of the second electrode (21) and the electrolyte (28). The existence of the gap, as shown in the drawings, indicates that the tapered walls could not play a role in maintaining electrolyte contact during probe operation. The drawings do reveal, though, how the tapered walls could serve the purpose of guiding the electrolyte tube "into position against the flat area" during assembly of the probe. Col. 8, lines 35-36.

Further, the specification does not support Blumenthal's suggestion that the need to obtain ventilation of the zone of contact by furnace gases during operation of the probe is served by the tapered side walls of the second electrode. Rather, the specification refers generally to gas being exchanged "through the openings in the electrode plate." Col. 4, lines 21-22. In addition, with reference to figures 3, 3a, and 4a, the specification states that "gas can flow or is exchanged, for example, through or from opening 27 and holes 41, along the grooves 39 and electrolyte end 33, through the annular space between the cylindrical surface 25 and outer surface of electrolyte tube 28." Col. 8, lines 3-8.

Finally, in connection with its response to Barber-Colman's motion for summary judgment, Blumenthal stated "Agreed" with respect to the following statement by Barber-Colman in support of the motion: "In the patented probe, a tapered guideway engages the end of the electrolyte and, if that end is off center, guides or translates it toward the center of the sheath as the electrolyte tube is inserted into the sheath to its seated position." This is precisely the kind of guiding function that the district court concluded the tapered walls of the second electrode would provide.

For the foregoing reasons, we conclude that the district court properly construed clause b of claim 9 as relating to assembly, rather than operation, of the probe. The question then becomes whether, in light of that construction, Blumenthal established the existence of a genuine issue of material fact so as to defeat Barber-Colman's motion for summary judgment. We hold that it did not.

C. The district court's construction of the specification is flawed.

The district court granted Barber-Colman's motion for summary judgment because it found the declaration of Andreas T. Melville — the only evidentiary item offered by Blumenthal in response to the motion — to be "conclusory" as to the frusto-conical and guiding limitations of the claim. The court determined that the declaration did not contain facts "showing that the accused probes have a taper which guides the electrolyte" and that it failed to state "how the accused probes have a guiding function." The court concluded: "By not stating that the accused probes contain a taper which guides the electrolyte, plaintiffs have failed to show how the specific limitations described in claim 9, as properly construed, can be found on the accused probes."

[2] Through the declarations of Joseph A. Lincoln and Stella R. Bielefeldt, both submitted in support of its motion for summary judgment, Barber-Colman came forward with evidence tending to show that the structure of the accused probes is tubular and does not contain a tapered surface and that, accordingly, the accused probes do not infringe claim 9. Referring to the Barber-Colman devices, the Bielefeldt declaration states: "The electrolyte assembly is a long thin tube which must be inserted into the sheath. The sheath is a hollow tube of about the same length and larger diameter, closed at one end by an end cap. The end cap has a central socket into which the end of the electrolyte assembly must be inserted." According to Ms. Bielefeldt, "there is no guideway in Barber-Colman's probes which will properly seat the end of the electrolyte assembly in the central socket." The Lincoln affidavit states: "There is no structure in [either of the two accused probes] which will guide the electrolyte pellet to the center of the sheath. . . . There is no taper in the walls of the sheath which would direct the electrolyte pellet into the central socket."

Faced with this showing, it was incumbent upon Blumenthal to establish the existence of a genuine issue of material fact with respect to whether the "guide the electrolyte" limitation of clause b is found in the accused probes. To do this, Blumenthal had to "point to an evidentiary conflict in the record; mere denials or conclusory statements [would be] insufficient." *SRI Int'l v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1116, 227 USPQ 577, 582 (Fed. Cir. 1985) (citing *Barmag Barmer Maschinenfabrik AG v. Murata Mach. Ltd.*, 731 F.2d 831, 836, 221 USPQ 561, 564 (Fed. Cir. 1984)).

Blumenthal, by submitting only the Melville declaration, failed to carry that burden.

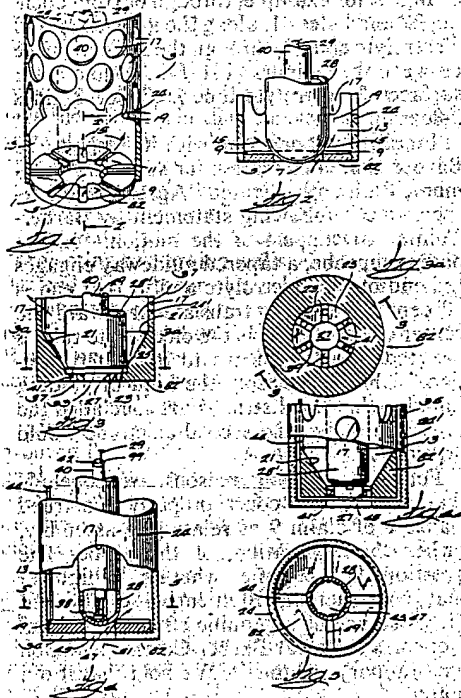
Significantly, the Melville declaration does not address the statements in the Bielefeldt declaration and the Lincoln affidavit quoted above concerning the structure and assembly of the Barber-Colman probes. Rather, the Melville declaration states that the function of the "frusto-conical interior surface" referenced in clause b of claim 9 is "to keep the electrolyte in contact with the electrode, to maintain electrical contact so that the probe continues to function satisfactorily during operation." The Melville declaration further states that this same function is performed in the same way to achieve the same result in the Barber-Colman probes by the surfaces marked "C" in deposition exhibit 110. For the reasons stated above, we conclude that Mr. Melville incorrectly construes clause b when he says that the function of the tapered side walls of the second electrode in claim 9 is to hold the electrolyte in place during probe operation. He also incorrectly equates those tapered side walls with "surfaces C" of the accused probes.

What Mr. Melville references as "surfaces C" in the accused probes are the inner walls of the "central socket" of the "end cap" described in the Bielefeldt declaration. Those "surfaces C" are not the side walls of the cylindrical sheath into which the electrolyte assembly in the accused probes is inserted. It is the side walls of the cylindrical sheath of the accused probes, however — not the inner walls of the central socket — that correspond to the "frusto-conical interior surface" described in clause b. Moreover, the function of the inner walls of the central socket is not to guide the electrolyte during placement, which is the function of the tapered side walls of the second electrode in claim 9. Rather, the inner walls of the central socket in the accused probes hold the electrolyte assembly in place during operation. Ms. Bielefeldt states: "I hold the electrolyte assembly at one end and feed it into the open end of the sheath. The free end of the electrolyte must then be seated in the socket. The arrangement is not self-seating so I need tweezers to grasp the end of the electrolyte assembly and to manually position it in the central socket." The Bielefeldt declaration and the Lincoln affidavit indicate that Barber-Colman's probes do not contain tapered side walls that guide the electrolyte into place during assembly, and that the electrolyte in the Barber-Colman probes must be seated in the central socket with tweezers. In sum, the Melville declaration (i) fails to counter Barber-Colman's evidence with respect to the structure and

assembly of the accused probes, (ii) misconstrues the pertinent limitation of the claim at issue ("frusto-conical interior surface"), and (iii) then applies that limitation to a non-corresponding structure in the accused probes (the central socket). Thus, the declaration fails to respond to the showing made by Barber-Colman in support of its motion for summary judgment.

For the foregoing reasons, Blumenthal has failed to establish the existence of a genuine issue of material fact with respect to whether the accused probes meet the limitation of clause b of claim 9 under the doctrine of equivalents. In order to prevail on its claim of infringement under the doctrine of equivalents, Blumenthal had to prove that the accused probes contain every limitation in claim 9. *Corning Glass Works v. Sumitomo Elec. U.S.A. Inc.*, 868 F.2d 1251, 9 USPQ2d 1962, 1967 (Fed. Cir. 1989). Barber-Colman demonstrated in its motion for summary judgment that Blumenthal could not do that. Accordingly, we affirm the order of the district court granting summary judgment in favor of Barber-Colman. We also affirm the district court's denial of Barber-Colman's motion for sanctions and attorney fees as within its discretion.

U.S. Patent May 13, 1986 Sheet 1 of 2 4,588,493



Newman, J., dis-

I respectfully dissent. The majority's decision of appellate review is found *de novo*.

The majority's decision does not encompass Barber-Colman's claim. *Markman Inc.*, 52 F.3d 967, 38 USPQ2d 1367 (Fed. Cir. 1995) (*en banc*). The disputed technical question is a proper question for an appellate court. Here, a question of fact is presented: whether sufficient evidence has been found to establish that the accused probes, whether cylindrical or tape wound, have been decided by the reading of the "all panel majority's" in the majority, reading of the claimed structure and manufacturing ass-

Blumenthal's '44 Gas Measuring Probe. An improved oxygenated probe has been designed to provide the point of contact and the outer electrodes that the atmosphere of the probe is represented in the furnace, and other reaction products be deposited at the contact; such deposits are obtained using probe provides more were available from.

The specification claims that the design of the tip of the electrode provides adequate contact, but the mutually antagonistic forces over a substantial good connection between the electrodes, whereas a point contact has a high contact resistance, but has a high contact resistance in the harsh environment. '493 Patent describes of electrode that is a reaction against increa-

robes, (ii) misconception of the claim at prior surface"), and limitation to a non- in the accused). Thus, the declaration, made in support of its motion for summary judgment, Blumenthal has stence of a genuine respect to whether the limitation of the doctrine of prevail on its claim of doctrine of equivalence to prove that the every limitation in *Vorke v. Sumitomo* (1251, 9 USPQ2d 19). Barber-Colman motion for summary judgment could not do that. We also affirm the of Barber-Colman's attorney fees as

#### Newman, J., dissenting.

I respectfully dissent, as to both the process of appellate review and the technologic facts found *de novo* by the panel majority.

The majority construes the claims so they do not encompass the accused equivalent of Barber-Colman's oxygen sensor probes. Following *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 34 USPQ2d 1321 (Fed. Cir. 1995) (*en banc*), the construction of disputed technical terms in infringement litigation is a proper *de novo* activity of this appellate court. However, equivalency is still a question of fact. In this case, there was sufficient evidence whereby the jury could have found equivalence between the electrodes, whether the electrode surfaces were cylindrical or tapered. The issue should not have been decided on summary judgment, whether by the district court's incorrect reading of the "all elements rule," or by the panel majority's incorrect, indeed extraordinary, reading of the claims to refer not to the claimed structure of the electrode, but to the manufacturing assembly of the electrode.

#### Infringement

Blumenthal's '493 Patent, entitled "Hot Gas Measuring Probe," describes and claims an improved oxygen sensing probe. The patented probe has a novel structure that is designed to provide ventilation at and around the point of contact between the electrolyte and the outer electrode. The ventilation ensures that the atmosphere in the vicinity of the probe is representative of the atmosphere in the furnace, and also carries off soot and other reaction products that could otherwise be deposited at the electrolyte/electrode contact; such deposits distort the readings that are obtained using the probe. The patented probe provides more accurate readings than were available from prior probes.

The specification of the '493 Patent explains that the dual purposes of ventilating the tip of the electrode and maintaining adequate contact with the electrolyte are mutually antagonistic. Electrical contact over a substantial surface area provides a good connection but is difficult to ventilate, whereas a point contact is easy to ventilate but has a high contact resistance and can result in interrupted electrical conductivity in the harsh environment of the furnace. The '493 Patent describes several configurations of electrode that balance improved ventilation against increased contact resistance.

The infringement issues in this case begin with construction, as a matter of law, of claim 9 of the '493 Patent, directed to an oxygen sensing probe of specified structure whereby ventilation is achieved of the point of contact of the second electrode and the electrolyte:

9. In an oxygen sensor for measuring the properties of a gas inside a furnace having a solid electrolyte means with an interior surface and an exterior surface, a first electrode in contact with the interior surface of the electrolyte; a second electrode having a surface in contact with the exterior surface of the electrolyte; conductor means for conducting a voltage generated between the first and second electrodes in correspondence with gas properties; and sheath means having a generally tubular wall surrounding the electrodes and electrolyte for supporting the electrodes and electrolyte within the furnace, the improvement wherein:

a. the electrolyte is in the form of a tube having a flat end on the exterior surface and adapted to contact the second electrode;

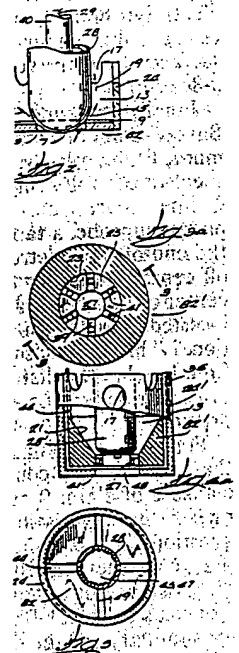
b. the second electrode defines a frusto-conical interior surface terminating in a grooved flat adapted to guide the electrolyte and a central opening in said electrode flat; and

c. the second electrode defining a plurality of grooves in the inside face thereof and extending radially from the central opening,

so that the gas may be exchanged with the interior of the sheath by flow to, through or from the central opening, through the grooves, and past the electrolyte to the interior of the sheath means thereby ventilating the points of contact between the electrolyte and second electrode.

The two disputed terms appear in claim clause (b) the "frusto-conical interior surface" of the second electrode, and the phrase "adapted to guide the electrolyte." Barber-Colman conceded, for the purposes of its summary judgment motion, that all other claim terms read on its accused probes.

Barber-Colman's second electrode surface was cylindrical instead of frusto-conical. That is, in Barber-Colman's electrode the sides were not tapered. Barber-Colman argues on this appeal that the phrase "adapted to guide the electrolyte" refers to the manufacturing assembly of the probe, and not to guidance during use of the probe. The panel majority has adopted this "curious" position, although manufacturing assembly has nothing at all to do with the invention that is



described in the specification and defined in the claims. There is no mention of manufacturing assembly in the prosecution history or the prior art. In selecting this theory of the technological meaning of the claims, the majority has gone outside of the resources that the court established in *Markman* for appellate claim interpretation as a matter of law.

Although *Markman* did not hold that the factual issues of equivalency were to be removed from the jury, the parties have been denied trial of the disputed facts of equivalency, this court finding new facts based on a deposition inquiry into an issue that is irrelevant to the claimed invention. Whether the frusto-conical shape of the second electrode facilitates assembly during manufacture has no relation to the structure that guides the electrolyte in order to maintain ventilation at the zone of contact during use: that is the claimed invention. The meaning of a claim term is decided *de novo* on appeal, in light of the claims, the specification, and the prosecution history. *Markman*, 52 F.3d at 979, 34 USPQ2d at 1329-30. The claims, the specification, and the prosecution history makes no mention of guidance during assembly of the probe. No prior art reference is directed to the assembly of probes. Nothing in the prosecution history even remotely suggests that the invention relates to the manufacturing process.

The word "guide" as used in the specification describes the structure that provides ventilation. For example, at Col. 4, lines 35-48, a modified embodiment is described:

In a modified embodiment, the anode is disc-shaped with projecting converging walls which guide the flat end of tubular electrolyte to positively position the electrolyte over a central aperture in a flat portion. To provide adequate ventilation, the end of the electrode is fabricated with a central hole, passing therethrough and several radial grooves in the inside face of the end wall. Additional holes may also be formed through the grooves. Gas passing through the holes and grooves flows between the corresponding portions of the electrolyte and electrode walls. This anode may be used in conjunction with a sheath of the same material or with a ceramic sheath.

This is a description of the structure of the probe and how it works, not its assembly during manufacture. The panel majority states that Blumenthal conceded that the frusto-conical shape facilitates manufacturing assembly. Perhaps it does. However, that is entirely unrelated to the patented invention.

The panel majority states that the drawings of the '493 Patent show a gap between the sides of the electrolyte and the inner surface of the electrode, and concludes that since the electrode surface and the electrolyte are not touching each other, the electrode can not guide the electrolyte during use of the probe. However, the majority misreads the claim, which states: the "frusto-conical interior surface terminating in a grooved flat adapted to guide the electrolyte." Both the tapered surface of the claimed electrode and the cylindrical surface of the accused electrode terminate in a grooved flat, "adapted to guide the electrolyte." It is unambiguous that the claim — as well as the specification, the prior art, and the prosecution history — refers to the structure of the probe. The patentee was incorrectly subjected to *de novo* appellate decision on inapplicable findings.

#### *The All Elements Rule*

The district court decided the case on an application of the "all elements rule" of *Pennwalt Corp. v. Durand-Wayland, Inc.*, 833 F.2d 931, 4 USPQ2d 1737 (Fed. Cir. 1987) (*en banc*, cert. denied, 485 U.S. 961 (1988)), the court holding that since the "element" of the frusto-conical electrode surface was not present, the all elements rule was violated. Thus the district court held that a finding of infringement under the doctrine of equivalents was precluded.

A claim element is a discrete component or element of the device as set forth in the claim. See *Pennwalt*, 833 F.2d at 939, 4 USPQ2d at 1743. ("position indicating means" is a claim element). Blumenthal points out that the frusto-conical shape is not a missing claim element as contemplated by *Pennwalt*, but simply the shape that is described for a claim element that is present, viz., the second electrode. Blumenthal states that all of the claim elements are present in the accused probes, and that the only difference is the shape of the second electrode. Blumenthal has correctly stated the law.

Whether the cylindrical and frusto-conical shapes are equivalent is a question of fact. This question was not subject to summary resolution against the non-movant, for Blumenthal provided sufficient evidence where by a reasonable jury could find equivalency between the form of the claimed and the accused electrodes. A change in form is a classical subject of the doctrine of equivalents. See, e.g., *Winans v. Denmead*, 56 U.S. (15 How.) 330, 342 (1854). ("It is a familiar rule that to copy the principle or

mode of operation described, although such copy is unlike the original in form.

The facts of equivalence. Thus I must dissent from resolution of this case.

U.S. District  
Eastern District of

Artmatic USA Cosmetic

No. CV-94

Decided December

#### JUDICIAL PRACTICE PROCEDURE

##### 1. Procedure — Dismissal (\$410.32)

Patent infringement procedure set aside default judgment for claim for declaration of non-infringement is denied, even though defendant's motion with plaintiffs do not since plaintiffs have not shown cause for default and have that default was not will prejudice to defendants' plaintiffs' presumed will plaintiffs have not demonstrated meritorious defense claims, or that their interest in default judgment outweighs in finality and compliance procedure.

##### 2. Procedure — Prior adjudication; collateral estoppel

"Foreseeability" exception against permitting collateral estoppel on default judgments, under bound by default judgments reasonably should have foreseen having stake in outcome matter, does not apply to entered for defendants on the for declaratory judgment, since limited circumstances foreseeability exception has dissimilar from those of prior since separate doctrine has on question of when judgment invalidity may preclude issue in subsequent proceeding.

##### 3. Procedure — Prior adjudication; collateral estoppel

Default judgment of patent maintained by two infringement

majority states that the draw-93 Patent show a gap between the electrolyte and the inner electrode, and concludes that electrode surface and the electrode touching each other, the electrode guide the electrolyte during use. However, the majority misstates, which states: the "frusto-conical surface terminating in a tapered surface of the electrode and the cylindrical surface of the electrode terminate in a tapered surface adapted to guide the electrolyte." The court is ambiguous that the claim, as specified, the prior art, and in history — refers to the structure. The patentee was inclined to *de novo* appellate decision findings.

#### The All Elements Rule

The court decided the case on an application of the "all elements rule" of *Grain Processing Corp. v. Durand-Wayland, Inc.*, 11 F.3d 1737 (Fed. Cir. 1994), cert. denied, 485 U.S. 961 (1988), holding that since the "electrode-conical electrode surface element, the all elements rule was applied. The district court held that a finding under the doctrine of 'all elements' was precluded.

Element is a discrete component of the device as set forth in the *Grain Processing*, 833 F.2d at 939, 4 USPQ2d 1743. ("position, indicating claim element). Blumenthal states that the frusto-conical shape is not an element as contemplated by the claim, simply the shape that is described. Blumenthal states that claim elements are present in the prior art, and that the only difference between the second electrode and the first is that the law is cylindrical and frusto-conical. Equivalent is a question of fact. It was not subject to summary judgment. The non-movant, for Blumenthal, sufficient evidence where the jury could find equivalency form of the claimed and the prior art. A change in form is a subject of the doctrine of equivalence. *Winans v. Denmead*, 56 U.S. 330, 342 (1854). ("It is a question, to copy the principle or

mode of operation described, is an infringement, although such copy should be totally unlike the original in form or proportions." The facts of equivalency require trial. Thus I must dissent from the majority's resolution of this case.

#### U.S. District Court Eastern District of New York

Artmatic USA Cosmetics v. Maybelline Co.

No. CV-94-1799

Decided December 5, 1995

#### JUDICIAL PRACTICE AND PROCEDURE

##### 1. Procedure — Dismissal; default judgment (§410.32)

Patent infringement plaintiffs' motion to set aside default judgment entered on counterclaim for declaration of patent invalidity is denied, even though defendants that settled with plaintiffs do not oppose motion, since plaintiffs have not presented valid excuse for default and have thus failed to show that default was not willful, since lack of prejudice to defendants cannot overcome plaintiffs' presumed willfulness, and since plaintiffs have not demonstrated that they had meritorious defense against counterclaims, or that their interest in setting aside default judgment outweighs public interest in finality and compliance with rules of procedure.

##### 2. Procedure — Prior adjudication — Res judicata; collateral estoppel (§410.1503)

"Foreseeability" exception to general rule against permitting collateral estoppel based on default judgments, under which litigant is bound by default judgment to extent litigant reasonably should have foreseen other parties having stake in outcome of defaulted matter, does not apply to default judgment entered for defendants on their counterclaim for declaratory judgment of patent invalidity, since limited circumstances in which foreseeability exception has been applied are dissimilar from those of present case, and since separate doctrine has been developed on question of when judgments of patent invalidity may preclude litigation of that issue in subsequent proceedings.

##### 3. Procedure — Prior adjudication — Res judicata; collateral estoppel (§410.1503)

Default judgment of patent invalidity obtained by two infringement defendants does

not preclude plaintiffs from asserting patent against third co-defendant, since denial of co-defendant's prior motion for default judgment on its counterclaim for declaration of patent invalidity, combined with intrinsic presumption of patent validity, weighs against application of collateral estoppel, and since it would be inconsistent to permit co-defendant to benefit from default judgments secured by other defendants in view of denial of prior default judgment motion.

##### Particular patents — General and mechanical — Cosmetic packaging

4,892,194, García, display package for a cosmetic article, motion to set aside default judgment of invalidity denied; summary judgment of noninfringement and invalidity denied.

Re. 33,191 (of 4,469,226), Matney, blister pack panel for face powder compact display, motion to set aside default judgment of invalidity denied; summary judgment of noninfringement and invalidity denied.

Action by Artmatic USA Cosmetics and Arthur Matney against Maybelline Co., Max Factor Corp., Noxell Corp., and others for patent infringement, in which defendants counterclaim. On plaintiffs' motion to modify default judgment entered against them on counterclaim by eliminating declaration of patent invalidity, and on motion of defendant Maybelline Co. for summary judgment based on collateral estoppel effect of default judgment. Both motions denied.

Robert D. Katz, of Cooper & Dunham, New York, N.Y., for plaintiffs.

Gregory F. Hauser, of Walter, Conston, Alexander & Green, New York, for defendant Maybelline Co.

Glasser, S.J.

#### SUMMARY

This multi-defendant action for patent infringement is before the Court on two motions: (1) a motion by plaintiffs Artmatic USA Cosmetics and Arthur Matney ("Artmatic") to modify the default judgment entered against them on October 18, 1994 by eliminating a declaration of patent invalidity; and (2) a motion by defendant Maybelline Co. ("Maybelline") for summary judgment based on the collateral estoppel effect of the default judgments secured by Max Factor and Noxell. For the reasons below,

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